BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

PRE-MEASUREMENT

Name of work: Improvements to Roads and Drains at Yerappa Garden in Ward No. 09 (Vidyaranyapura).

Estimated Cost : Rs. 96.00 Lakhs

Job Code: 009-22-000011

Head of Account : P-0190 Works Sancrioned by Hon. Mayot

Name of Agency: M/s. K. R Constructions, Prop: C. Mahesh, No. 286, 7th B Cross, Jakkur Layout, Bangalore.

Work order No: BBMP/EE/BTP/WO/55/2022-23 Dated: 29-06-2022.

Measurements Recarded on : 07/07/2022

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead I By Manual Means B Cement Concrete Grade M-15 & M-20								
									Cum
	Pruthvi Enclave Road '	1	5.10			1.50	0.23	1.76	
	Cross Road 1	1	5.80			1.50	0.23	2.00	
	Cross Road 2	1	5.00			1.20	0.23	1.38	
			Total Qty =					**5.14**	
	Total		Qty Limited to Tender Qty =					**5.04**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidayranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	07/07/2022							
2	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead (iii) Dismantling Stone Masonry B Rubble stone masonry in cement mortar.								
									Cum
	Pruthvi Enclave Road	2	5.10			0.50	0.60	3.06	
	Cross Road 1	2	5.80			0.50	0.60	3.48	
	Cross Road 2	2	5.00			0.50	0.60	3.00	
			Total Qty =					**9.54**	
	Total		Qty Limited to Tender Qty =					**9.48**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	11/07/2022							
3	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								
New Drain									Cum
4th A Cross Road Seetha Ramaya Layout									
E/S	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	1.30			1.10	0.90	1.29		
W/S									
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	3.10			1.10	0.90	3.07		
Pruthvi Enclave Road N/S									
	1	15.00			1.10	0.90	14.85		
	1	3.20			1.10	0.90	3.17		
	1	15.00			1.10	0.90	14.85		
	1	9.30			1.10	0.90	9.21		
Chikka Venkatappa Layout Main Road									
W/S	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	12.80			1.10	0.90	12.67		
	1	3.60			1.10	0.90	3.56		
	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	4.70			1.10	0.90	4.65		
E/S	1	10.60			1.10	0.90	10.49		
S/S	1	15.00			1.10	0.90	14.85		
	1	15.00			1.10	0.90	14.85		
	1	7.50			1.10	0.90	7.43		
New Culverts									
Main Road	1	6.30			1.80	1.00	11.34		
Pruthvi Enclave Road	1	5.10			1.40	1.00	7.14		
Cross Road 1	1	5.80			1.40	1.00	8.12		

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Cross Road 2	1	5.00			1.40	1.00	7.00	
	4th Main Road	1	6.00			1.80	1.00	10.80	
		1	7.80			1.80	1.00	14.04	
	Drain Desilt								
	Yerappa Garden Main Road	1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	5.10			0.60	0.45	1.37	
	W0602								
	R/S	1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	14.20			0.60	0.45	3.83	
	L/S								
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	15.00			0.60	0.45	4.05	
		1	14.20			0.60	0.45	3.83	
	W0917								
	R/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	2.10			0.45	0.45	0.42	
	L/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	2.10			0.45	0.45	0.42	
	W0919								
	R/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	2.00			0.45	0.45	0.40	

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	L/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	2.00			0.45	0.45	0.40	
	W0913								
	R/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	6.50			0.45	0.45	1.31	
	L/S	1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	15.00			0.45	0.45	3.03	
		1	6.50			0.45	0.45	1.31	
			Total Qty =					**611.80**	
	Total		Qty Limited to Tender Qty =					**584.91**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	15/07/22							
4	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications.								
	For Drain								Cum
	4th A Cross Road Seetha Ramaya Layout								
	E/S	1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	1.30			1.10	0.15	0.21	
	W/S								
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	3.10			1.10	0.15	0.51	
	Pruthvi Enclave Road N/S								
		1	15.00			1.10	0.15	2.48	
		1	3.20			1.10	0.15	0.53	
		1	15.00			1.10	0.15	2.48	
		1	9.30			1.10	0.15	1.53	
	Chikka Venkatappa Layout Main Road								
	W/S	1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	12.80			1.10	0.15	2.11	
		1	3.60			1.10	0.15	0.59	
		1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	4.70			1.10	0.15	0.78	
	E/S	1	10.60			1.10	0.15	1.75	
	S/S	1	15.00			1.10	0.15	2.48	
		1	15.00			1.10	0.15	2.48	
		1	7.50			1.10	0.15	1.24	
	New Culverts								
	Main Road	1	6.30			1.80	0.15	1.70	
	Pruthvi Enclave Road	1	5.10			1.40	0.15	1.07	
	Cross Road 1	1	5.80			1.40	0.15	1.22	
	Cross Road 2	1	5.00			1.40	0.15	1.05	

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	4th Main Road	1	6.00			1.80	0.15	1.62	68.75
		1	7.80			1.80	0.15	2.11	
			Total Qty =					**72.47**	
	Total		Qty Limited to Tender Qty =					**71.18**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	20/07/2022							
6	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.								
	RCC Drain	**No**	**L**	**Mtrs**					Tonne
	4th A Cross Road Seetha Ramaya Layout E/S								
	10 mm 'U' Shape	609	2.50	1522.50					
	8 mm Horizontal	18	91.30	1643.40					
	4th A Cross Road Seetha Ramaya Layout W/S								
	10 mm 'U' Shape	777	2.50	1942.50					
	8 mm Horizontal	18	93.10	1675.80					
	Pruthvi Enclave Road N/S								
	10 mm 'U' Shape	153	2.50	382.50					
	8 mm Horizontal	17	18.20	309.40					
	Pruthvi Enclave Road N/S								
	10 mm 'U' Shape	204	2.50	510.00					
	8 mm Horizontal	17	24.30	413.10					
	Chikka Venkatappa Layout								
	10 mm 'U' Shape	927	2.50	2317.50					
	8 mm Horizontal	17	111.10	1888.70					
	Chikka Venkatappa Layout Main Road								
	10 mm 'U' Shape	91	2.50	227.50					
	8 mm Horizontal	17	10.60	180.20					
	Chikka Venkatappa Layout Main Road								
	10 mm 'U' Shape	314	2.50	785.00					
	8 mm Horizontal	17	37.50	637.50					
	Culvert								
	Main Road								
	16 mm Double Mat 'U' Shape	42	2.50	105.00					
	12 mm Horizontal	18	6.30	113.40					
	Pruthvi Enclave Road								
	16 mm Double Mat 'U' Shape	34	2.50	85.00					
	12 mm Horizontal	18	5.10	91.80					
	Cross Road 1								
	16 mm Double Mat 'U' Shape	39	2.50	97.50					
	12 mm Horizontal	18	5.80	104.40					
	Cross Road 2								
	16 mm Double Mat 'U' Shape	33	2.50	82.50					
	12 mm Horizontal	18	5.00	90.00					
	4th Main Road								
	16 mm Double Mat 'U' Shape	40	2.50	100.00					
	12 mm Horizontal	18	6.00	108.00					
	4th Main Road								
	16 mm Double Mat 'U' Shape	52	2.50	130.00					
	12 mm Horizontal	18	7.80	140.40					

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
					Mtrs	Kg/m	Kgs		
	Total Qty 16 mm				600.00	1.58	948.00		
	Total Qty 12 mm				648.00	0.89	576.72		
	Total Qty 10 mm				7687.50	0.62	4766.25		
	Total Qty 8 mm				6748.10	0.39	2631.76		
							8922.73	Kgs	
		Total Qty =					8.92		
		Qty Limited to Tender Qty =					8.92	Tonnes	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

	Measurements Recarded on :

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	22/07/2022							
9	Earth work in surface Excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In all kinds of soils upto 300 mm depth.								
	For New Road								Cum
	4th A Cross Road Seetha Ramayya Layout								
		1	15.00	6.00	4.80	5.40	0.35	28.35	
		1	15.00	4.80	5.80	5.30	0.35	27.83	
		1	15.00	5.80	5.20	5.50	0.35	28.88	
		1	15.00	5.20	5.80	5.50	0.35	28.88	
		1	15.00	5.80	5.60	5.70	0.35	29.93	
		1	15.00	5.60	6.00	5.80	0.35	30.45	
		1	2.80	6.00	5.70	5.85	0.35	5.73	
	Total		Total Qty =					**180.03**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	25/07/2022							
10	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.								
	For New Road								Sqm
	4th A Cross Road Seetha Ramayya Layout								
		1	15.00	6.00	4.80	5.40		81.00	
		1	15.00	4.80	5.80	5.30		79.50	
		1	15.00	5.80	5.20	5.50		82.50	
		1	15.00	5.20	5.80	5.50		82.50	
		1	15.00	5.80	5.60	5.70		85.50	
		1	15.00	5.60	6.00	5.80		87.00	
		1	2.80	6.00	5.70	5.85		16.38	
	Total		Total Qty =					**514.38**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Description of work	Mesurement						Qty.	Rate / Unit
		No.	L	B1	B2	Av.B	D		
	Measurements Recarded on :	25/07/2022							
11	Construction of Granular Sub-Base of required grading as per design mixing in a mechanical mix plant at OMC, carriageof mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 (For Grading -V Material)								
									Cum
	For New Road								
	4th A Cross Road Seetha Ramayya Layout								
		1	15.00	6.00	4.80	5.40	0.15	12.15	
		1	15.00	4.80	5.80	5.30	0.15	11.93	
		1	15.00	5.80	5.20	5.50	0.15	12.38	
		1	15.00	5.20	5.80	5.50	0.15	12.38	
		1	15.00	5.80	5.60	5.70	0.15	12.83	
		1	15.00	5.60	6.00	5.80	0.15	13.05	
		1	2.80	6.00	5.70	5.85	0.15	2.46	
	Total		Total Qty =					**77.16**	

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidayranyapura Sub Division
B.B.M.P, Bangalore - 97